

EUROPORT

EPA800

User Manual

A50-43113-00004

en



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IMPORTANT SAFETY INSTRUCTIONS



CAUTION:

To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside; refer servicing to qualified personnel.

WARNING:

To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus shall not be exposed to dripping or splashing liquids and no objects filled with liquids, such as vases, shall be placed on the apparatus.



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure—voltage that may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.
- 12) Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
- 13) Only use attachments/accessories specified by the manufacturer.
- 14) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



15) Unplug this apparatus during lightning storms or when unused for long periods of time.

16) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

17) CAUTION - These service instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operation instructions.



EUROPORT

Ultra-Compact 800-Watt 8-Channel Portable PA System with Digital Effects and FBQ Feedback Detection

- ▲ Ultra-compact 800-Watt, 8-channel portable PA system
- ▲ Enormous power, incredible sonic performance, and super-light weight means no more lugging around dead weight
- ▲ Extremely powerful 10" woofers and 1.25" compression drivers for incredible sound reproduction
- ▲ Studio-grade 24-bit stereo FX processor with 100 awesome presets including reverb, chorus, flanger, delay, pitch shifter and various multi-effects
- ▲ Revolutionary FBQ Feedback Detection system instantly reveals critical frequencies for easy feedback removal
- ▲ 8-channel mixer section comprises 4 mono and 2 stereo channels plus separate CD inputs
- ▲ 4 high-quality mic preamps with switchable +48 V phantom power for condenser microphones
- ▲ Effective, extremely musical 2-band EQ, switchable Pad and Clip LEDs on all mono channels
- ▲ Stereo 7-band graphic EQ allows precise frequency correction of main outputs
- ▲ Voice Canceller function removes singer's voice from recordings for karaoke applications
- ▲ Dedicated mono output with integrated low-pass filter for subwoofer application
- ▲ Stereo Aux inputs for external devices such as sub mixers, etc.
- ▲ Comes with a BEHRINGER XM1800S microphone, a mic clip and 20' cables
- ▲ Integrated storage compartment for microphones, cables, and accessories
- ▲ Internal switch-mode power supply for maximum flexibility, noise-free audio, superior transient response, and lowest possible power consumption
- ▲ High-quality components and exceptionally rugged construction ensure long life
- ▲ Conceived and designed by BEHRINGER Germany

FOREWORD



Dear Customer,

Welcome to the team of EUROPORT users, and thank you very much for expressing your confidence in BEHRINGER by purchasing this PA system.

Writing this foreword for you gives me great pleasure, because it represents the culmination of many months of hard work delivered by our engineering team to achieve a very ambitious goal: to present an outstanding PA system whose amazing functions offer a

maximum on flexibility and performance. The task of designing our new EPA800 certainly meant a great deal of responsibility, which we assumed by focusing on you, the discerning user and musician. Meeting your expectations also meant a lot of work and night shifts. But it was fun, too. Developing a product usually brings a lot of people together, and what a great feeling it is when all who participated in such a project can be proud of what they've achieved.

It is our philosophy to share our enjoyment with you, because you are the most important member of the BEHRINGER team. With your highly competent suggestions for new products you've made a significant contribution to shaping our company and making it successful. In return, we guarantee you uncompromising quality as well as excellent technical and audio properties at an extremely reasonable price. All of this will let you give free rein to your creativity without being hampered by budget constraints.

We are often asked how we manage to produce such high-quality equipment at such unbelievably low prices. The answer is quite simple: it's you, our customers! Many satisfied customers mean large sales volumes enabling us to get better purchasing terms for components, etc. Isn't it only fair to pass these benefits on to you? Because we know that your success is our success too!

I would like to thank all of you who have made the EPA800 possible. You have all made your own personal contributions, from the developers and the many other employees at this company to you, the BEHRINGER user.

My friends, it's been worth the effort!

Thank you very much,

Uli Behringer

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1. INTRODUCTION

Thank you for purchasing the EUROPORT EPA800. The EPA800 is a portable, ultra-compact powered mixer/loudspeaker combination with enormous power, unbelievable sound, and an extremely low weight. The mixer unit has 8 input channels (4 mono and 2 stereo channels), an internal 24-bit studio-quality effects processor, and a 7-band graphic equalizer with FBQ feedback detection. All channels have ultra-high precision 2-band EQs and CLIP LEDs for total control. At 800 Watts, the high-performance power amp is properly sized, and with the 2 supplied loudspeakers a microphone, including cable, you can get going right away!

With the EPA800, you can quickly and easily master any sound situation.

We at BEHRINGER hope you enjoy your new acquisition.

1.1 Before you get started

1.1.1 Shipment

Your EPA800 was carefully packed at the factory, and the packaging was designed to protect the unit from rough handling. Nevertheless, we recommend that you carefully examine the packaging and its contents for any signs of physical damage that may have occurred during transit.

If the unit is damaged, please do NOT return it to BEHRINGER. Instead, notify your dealer and the shipping company immediately. Otherwise, claims for damage or replacement may not be honored.

Always use the original packing carton to prevent damage during storage or transport.

Make sure that no children are left unsupervised with the unit or its packaging.

Please ensure proper disposal of all packing materials.

1.1.2 Initial operation

Be sure that there is enough space around the unit for cooling. To avoid overheating, please do not place the EPA800 near radiators and other equipment emanating heat.

Blown fuses must be replaced by fuses of the same type and rating! Please refer to the "TECHNICAL SPECIFICATIONS" section for the correct rating. To avoid an electric shock, turn off and unplug the unit before replacing the fuse. For more information, please see Chapter 3.8 and Figure 3.9.

The mains connection is made using the enclosed power cord and a standard IEC receptacle. It meets all of the international safety certification requirements.

Before connecting the unit to the mains, please check that it is set to the correct supply voltage.

You have to use another fuse if you set the unit to another supply voltage. The correct value is specified in Chapter "TECHNICAL SPECIFICATIONS".

Please make sure that all units have a proper ground connection. For your own safety, never remove or disable the ground conductor from the unit or of the AC power cord. The unit shall always be connected to the mains socket outlet with a protective earthing connection.

Please ensure that only qualified people install and operate the mixing console. During installation and operation, the user must have sufficient electrical contact to earth, otherwise electrostatic discharges might affect the operation of the unit.

The sound quality may diminish within the range of powerful broadcasting stations and high-frequency sources. Increase the distance between the transmitter and the device and use shielded cables for all connections.

1.1.3 Online registration

Please do remember to register your new BEHRINGER equipment right after your purchase by visiting www.behringer.com (alternatively www.behringer.de) and kindly read the terms and conditions of our warranty carefully.

Should your BEHRINGER product malfunction, our goal is to have it repaired as quickly as possible. To arrange for warranty service, please contact the retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may directly contact one of our subsidiaries. Corresponding contact information is included in the original equipment packaging (Global Contact Information/European Contact Information). Should your country not be listed, please contact the distributor nearest you. A list of distributors can be found in the support area of our website (www.behringer.com/support).

Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently.

Thank you for your cooperation!

2. INSTALLATION

The EPA800 mobile PA system consists of two loudspeakers and a powered mixer that easily join into a portable, wheeled unit for easy transportation. In the following sections, you will find out how to set up and start up the PA system.

2.1 Setup Preparations

Follow the instructions to ensure straightforward and reliable operation of the EPA800.

1. Open the upper latch.
2. Open the latches on the sides of the PA unit by pressing and then lifting them.
3. With one hand, grab hold of the recessed handle above the latch on the side of the loudspeaker and hold the upper handle with the other hand. Then, carefully remove the loudspeaker sideways from the mixer.

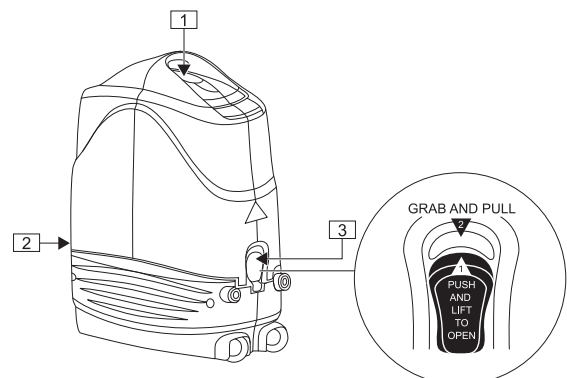


Fig. 2.1: EPA800 setup

Be careful to prevent the loudspeaker from accidentally falling on your foot.

4. Repeat Step 3 for the second loudspeaker.
5. Place the mixer in an upright position.

To assemble the PA unit for transportation, perform the steps in the reverse order.

2.2 Setup

1. Separate the three pieces of the PA unit as described in Chapter 2.1.
2. Place the mixing console and loudspeakers in the required positions in the venue.

 **Use of the optional loudspeaker stands ensures a wider, more even dispersion of sound.**

3. Using the supplied cables, connect the loudspeakers to the rear loudspeaker outputs.



CAUTION

ONLY connect the EPA800's loudspeakers, never other equipment, via the rear loudspeaker connectors. Otherwise, your equipment could get damaged.

4. Connect instruments, microphones, and additional equipment via the remaining connectors on the mixer (see Chapter 4).
5. If you have an active subwoofer available (not included), connect it to the SUB OUT socket.
6. Ensure that the two volume control knobs in the MAIN LEVEL CONTROL have been turned counterclockwise as far as possible.
7. Use the IEC power cord to connect the mixer's power inlet to an AC outlet.
8. Turn on the mixer.
9. Make the desired settings.



CAUTION

We would like to point out that high volume levels could damage your hearing. Always make sure that the appropriate volume is set.

3. CONTROL ELEMENTS AND CONNECTIONS

The EPA800 mixer is equipped with 4 mono and 2 stereo inputs and an additional AUX input. The input signals are internally distributed to a stereo bus. It is also possible to use its channels separately (mono), such as when used for FOH/PA and stage. Depending on the requirements, one stereo or two independent mono sounds can be run. An internal effect can be used as an AUX effect from each channel. The 7-band graphic equalizer is used to process the stereo bus or the two mono paths.

3.1 Mono Channels (1-4)

Channels 1-4 are designed as mono channels and are used to connect microphones or mono line-level sources. The connectors are balanced to ensure high interference resistance. If possible, you should use balanced cable connectors to profit from the advantages of this type of connection.

3.1.1 Microphone/Line Inputs

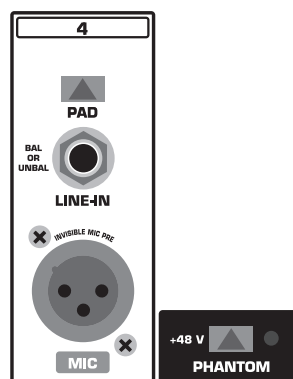


Fig. 3.1: Mono channel connectors

MIC

You can connect either dynamic microphones or condenser microphones to the MIC connector using XLR plugs.

LINE IN

Via the LINE IN connector, you can connect instruments (e.g., keyboards, electric guitars) or other line-level sources (e.g., CD player, external mixers, notebook sound card). The 1/4" jack accepts both balanced and unbalanced connectors.

PAD

With the PAD switch, you can weaken loud input signals by 20 dB. Use this function if the CLIP LED is lit up and the level cannot be reduced any further using the LEVEL control.

PHANTOM

With the PHANTOM switch, you can activate the phantom power supply for all microphone channels. Use the supply for condenser microphones.

3.2 Stereo Channels (5/6-7/8)

Channels 5/6-7/8 are designed as stereo channels and are used to connect stereo line-level sources.

3.2.1 Line Inputs

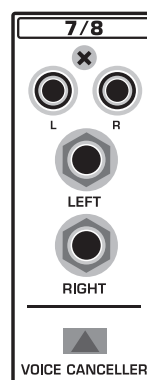


Fig. 3.2: Stereo channel connectors

LEFT (L) / RIGHT (R)

Via these connectors, you can connect stereo line-level sources (e.g., keyboard, CD player, external mixers, notebook sound card). Either the cinch jacks or the 1/4" jacks can be used, but not both at the same time.

VOICE CANCELLER (Channel 7/8)

The VOICE CANCELLER function enables voice to be filtered out of stereo signals. This function is useful for karaoke applications with a player (CD/MP3 player, etc.).

3.3 Channel Strips

Each channel strip is equipped with an equalizer section, an effects control, and one control each for signal routing and volume control.

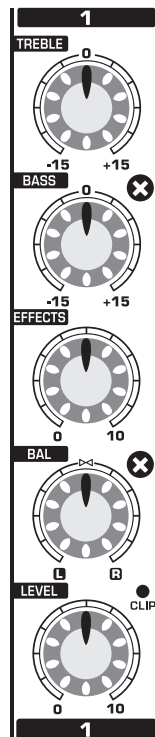


Fig. 3.3: Channel strip for a mono channel

TREBLE/BASS

The equalizer section comprises these two controls. With the TREBLE control, you can modify the high frequencies, and with the BASS control the low frequencies. Rotate the control knob:

- ▲ clockwise to boost the frequency range by max. 15 dB.
- ▲ counterclockwise to cut the frequency range by max. 15 dB.

👉 If you use the equalizer section to boost frequencies, the signal level of the channel increases. If the CLIP LED lights up, you need to reduce the level using the corresponding LEVEL control.

EFFECTS

With the EFFECTS control, you can specify the portion of the channel signal to be routed to the effects unit. The further clockwise you turn the control knob, the greater the effect that is applied to the signal. Turning the knob counterclockwise as far as possible results in a signal with no effects.

BAL

Use the BAL control of the mono channels to adjust the position of the signal within the stereo image (left/right) or for both mono paths. Turn the control:

- ▲ completely to the left to hear the signal only on the left side, that is the LEFT/MAIN path.
- ▲ completely to the right to hear the signal only on the right side, that is the RIGHT/MAIN path.

Positions between these settings will result in a proportionate signal allocation between LEFT/MAIN and RIGHT/MAIN.

The BAL control determines the levels of a stereo source's left and right input signals in relation to each other. Turn the control:

- ▲ completely to the left to hear only the left signal component of the stereo source on the LEFT/MAIN path.
- ▲ completely to the right to hear only the right signal component of the stereo source on the RIGHT/MAIN path.

Positions between these settings will result in a proportionate signal allocation of the left/right signal component between LEFT/MAIN and RIGHT/MAIN.

CLIP

When lit up, the CLIP LED indicates that the corresponding channel is being overdriven. If this LED lights up regularly, you need to reduce the level of the respective channel using the LEVEL control and/or the PAD switch.

LEVEL

The LEVEL control is used to set the volume of the channel signal. If the CLIP LED is lit up, the level has to be reduced using this control.

3.4 Additional Connections

The EPA800 is equipped with additional inputs and outputs as well as a footswitch connector.

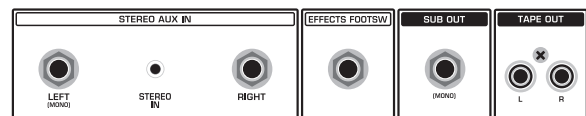


Fig. 3.4: Connectors for additional devices

STEREO AUX IN

The STEREO AUX IN sockets are designed as separate 1/4" jacks and as a stereo minijack. You can connect additional devices with adjustable line levels (e.g., other mixers, MD player) here. The signal is sent directly to the output busses, with no further adjustment possible. Use either the minijack or the two 1/4" jacks, not both types at the same time. For mono sources, use the LEFT connector.

EFFECTS FOOTSW

The EFFECTS FOOTSW socket is used to connect a footswitch. You can switch the effect on and off with the foot switch.

SUB OUT

You can connect an active subwoofer to the SUB OUT socket.

TAPE OUT

You can connect a 2-track recorder (DAT, MD, etc.) to the TAPE OUT sockets. The two TAPE OUTs carry the output bus signals.

SPEAKER OUTPUTS

The SPEAKER OUTPUTS connectors on the back of the unit are used to connect the supplied loudspeakers.

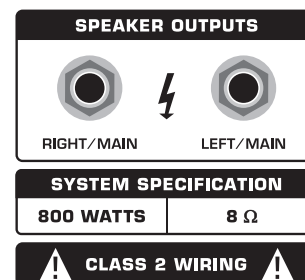


Fig. 3.5: Powered connectors for passive loudspeakers



CAUTION

The outputs are powered outputs, which put out a strong, amplified signal (not a low-level LINE signal!). For this reason, only **PASSIVE** loudspeaker systems can be connected. Other devices could get damaged.

- ▲ If loudspeakers with an impedance of 4 Ω are used, the two outputs have a maximum power of 800 W.
- ▲ If loudspeakers with an impedance of 8 Ω are used, the two outputs have a maximum power of 400 W.

3.5 Graphic Equalizer

The EPA800 is equipped with a 7-band graphic equalizer, which enables you to adapt the sound to the room conditions and your own ideas for the sound. The equalizer always processes the LEFT/MAIN and RIGHT/MAIN bus equally.

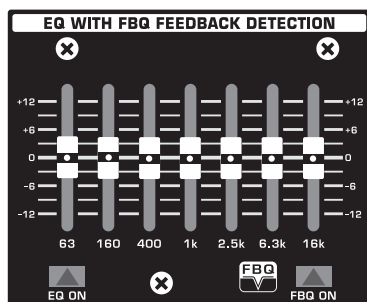


Fig. 3.6: Graphic equalizer section

EQ ON

You can activate the equalizer using the EQ ON switch.

FBQ ON

Using the FBQ ON switch, you can activate the feedback detection circuit. This function only has an effect if the equalizer is active. For every frequency that causes feedback, the corresponding LED on a slide control lights up. Lowering the displayed frequency minimizes feedback.

3.6 Effects Unit

The EPA800 is equipped with an internal stereo effects processor, which offers 100 different standard effects, including reverb, chorus, flanger, and echo, as well as various multieffects. It is permanently integrated into the mixer as a Send/Return effect; i.e., an adjustable signal portion can be routed to the effects unit from every input channel. The selected effect is applied to the signal portions of the channels, and the signals are then mixed with the direct signals via the stereo bus.

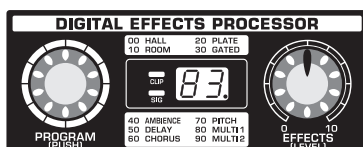


Fig. 3.7: Internal 24-bit multieffects unit

CLIP/SIG

The CLIP and SIG LEDs provide information on the signal level on the effects unit.

- ▲ When continuously lit up, the CLIP LED indicates a signal overdrive. In this case, the effects unit input level should be reduced through lowering of the Send level using the EFFECTS controls for the input channels.

- ▲ The SIG LED signalizes that the effects processor is receiving a signal and is working. If the LED is not lit up, the input signal is too weak.

PROGRAM (PUSH)

You can turn the PROGRAM control knob to select an effects preset. Then press the knob to activate the selected effect.

EFFECTS (LEVEL)

The EFFECTS (LEVEL) control is used to adjust the effects signal volume.

3.7 Main Power Section

The operating volume of the sound system is set via the main power section (MAIN LEVEL CONTROL).

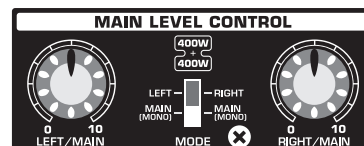


Fig. 3.8: Control elements in the main power section

LEFT/MAIN and RIGHT/MAIN

The two controls are used to adjust the volume of the corresponding loudspeaker outputs.

MODE

With the MODE switch, the power amplifier section can be switched to stereo or mono mode. Depending on the setting, the limiter, which provides overdrive protection for the system, works in coupled stereo or independent mono mode.

- 👉 Always remember to set the switch according to the given application to avoid incorrect limiter behavior!

3.8 Power Supply and Serial Number

FUSE HOLDER/IEC SOCKET

Connection to an AC power supply is made via an IEC socket. It complies with applicable safety regulations. A suitable AC power cord is included. Replace the fuse with a fuse of the same type.

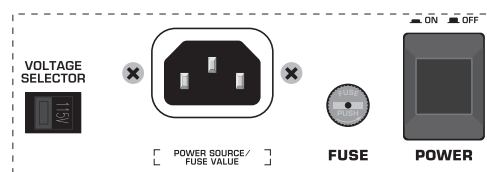


Fig. 3.9: Power supply and fuse

- 👉 To avoid an electric shock, turn off and unplug the unit before replacing the fuse.

POWER Switch

Use the POWER switch to start up the unit. The POWER switch should be in the "Off" position when you connect the unit to the AC power supply.

To disconnect the unit from the power supply, pull out the power plug. When starting up the unit, ensure that the power plug is easily accessible.

- 👉 Please note: Switching the POWER switch off does not completely disconnect the unit from the power supply. For this reason, you should unplug the power cord if the unit is not going to be used for a long period of time.

VOLTAGE SELECTOR

The VOLTAGE SELECTOR switch lets you set the correct operating voltage.

Before connecting the unit to the mains, please check that it is set to the correct supply voltage.

You have to use another fuse if you set the unit to another supply voltage. The correct value is specified in Chapter "TECHNICAL SPECIFICATIONS".

SERIAL NUMBER

The serial number can be found on the back of the mixer. It is needed for online registration.

4. APPLICATIONS

The EPA800 can be used for simple sound tasks, e.g., amplification of the presenter's voice, playback sound, or karaoke applications, as well as for demanding tasks such as band amplification or stage monitor sound. A typical example of use as a sound system for music with live instruments and players is given below.

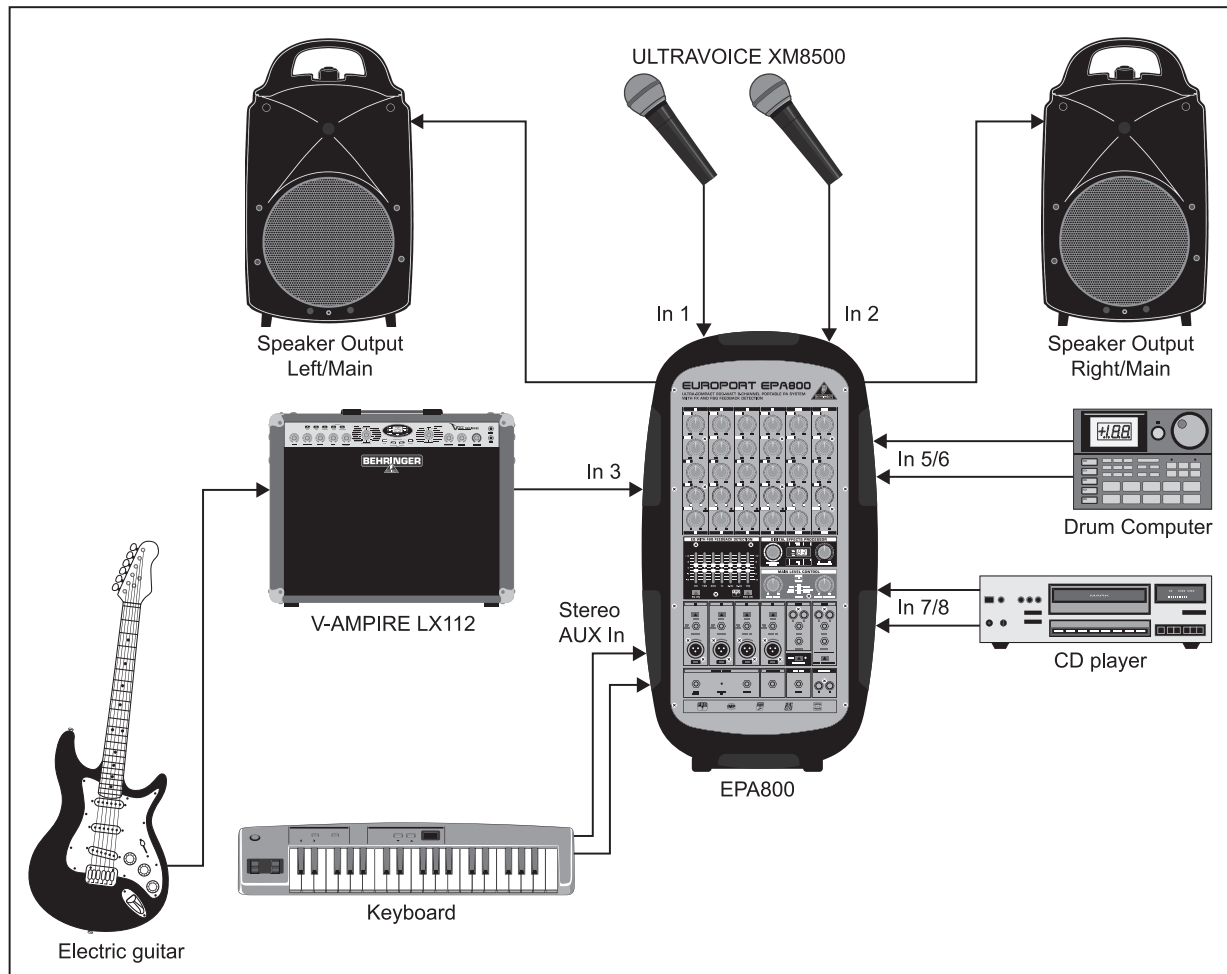


Fig. 4.1: Sound example

5. TECHNICAL SPECIFICATIONS

INPUTS 1-4

Type	4 x XLR, electronically balanced, 4 x 1/4" TRS jack, electronically balanced
Impedance	approx. 2.2 k Ω , balanced, approx. 1.1 k Ω , unbalanced
Input sensitivity	- 21 dBu @ PAD/OFF
Max. gain	+ 30 dB to + 10 dB
Phantom power supply	+ 48 V
Signal-to-noise ratio	- 90 dB, A-weighted
Channel separation	70 dB

INPUTS 5-8

Type	4 x 1/4" TS jack, unbalanced 4 x RCA phono jack, unbalanced
Impedance	approx. 20 k Ω , unbalanced
Input sensitivity	- 15 dBu
Max. gain	+ 20 dB
Signal-to-noise ratio	- 85 dB, A-weighted

STEREO AUX IN

Type	1 x 1/4" TS jack, unbalanced 1 x stereo minijack, unbalanced
Impedance	approx. 100 k Ω , unbalanced
Input sensitivity	- 8 dBu
Signal-to-noise ratio	- 90 dB, A-weighted

TAPE OUT

Type	2 x cinch jack, unbalanced
Impedance	approx. 1 k Ω
Max. output level	+ 17 dBu, unbalanced
Channel separation	< 70 dB

SUB OUT

Type	1 x 1/4" stereo jack, unbalanced
Impedance	approx. 1 k Ω
Max. output level	+ 21 dBu, unbalanced

CHANNEL EQ

BASS	\pm 15 dB @ 80 Hz
TREBLE	\pm 15 dB @ 27 kHz

EFFECTS

Converter	24-bit delta-sigma
Sampling frequency	40 kHz
Display	2-digit, 7-segment

EQ

Type	7-band
------	--------

LOUDSPEAKER OUTPUTS

Type	2 x 1/4" TS jack
Load impedance	8 Ω

OUTPUT POWER

RMS @ 1% THD (sine signal)	8 Ω	2 x 360 W
Peak power	8 Ω	2 x 400 W

SYSTEM SPECIFICATIONS

Frequency response	50 Hz to 44 kHz, \pm 3 dB
Distortion (THD + N)	0.32% @ 1 W

POWER SUPPLY

Power consumption	approx. 1,000 W
Fuse	T 10 A H 250V (100 – 120 V~, 50/60 Hz) T 10 A H 250 V (220 – 240 V~, 50/60 Hz)

DIMENSIONS/WEIGHT

Dimensions (H x W x D)	approx. 660 mm x 354 mm x 883 mm (26.0" x 13.9" x 34.8")
Weight	approx. 37.5 kg (82.5 lb)

BEHRINGER is constantly striving to maintain the highest professional standards. As a result of these efforts, modifications may be made from time to time to existing products without prior notice. Specifications and appearance may differ from those listed or illustrated.

6. EFFECTS TABLE

EFFECT PRESETS			EFFECT PRESETS		
No.	EFFECT	Description	No.	EFFECT	Description
HALL 00-09			DELAY 50-59		
00	SMALL HALL 1	approx. 1.0s reverb decay	50	SHORT DELAY 1	Like a short shattering
01	SMALL HALL 2	approx. 1.2s reverb decay	51	SHORT DELAY 2	1-2 short impulse(s)
02	SMALL HALL 3	approx. 1.5s reverb decay	52	SHORT DELAY 3	1-2 short impulse(s)
03	MID HALL 1	approx. 1.8s reverb decay	53	MID DELAY 1	Classical Delay for up-tempo music (115-125 BPM)
04	MID HALL 2	approx. 2.0s reverb decay	54	MID DELAY 2	Classical Delay for mid-tempo music (105-115 BPM)
05	MID HALL 3	approx. 2.5s reverb decay	55	MID DELAY 3	Classical Delay for reggae-tempo music (95-105 BPM)
06	BIG HALL 1	approx. 2.8s reverb decay	56	LONG DELAY 1	Classical Delay for reggae-tempo music (85-95 BPM)
07	BIG HALL 2	approx. 3.2s reverb decay	57	LONG DELAY 2	Classical Delay for dub-tempo music (75-85 BPM)
08	BIG HALL 3	approx. 4s reverb decay	58	LONG DELAY 3	Extra long (nearly infinite) delay effect
09	CHURCH	approx. 7s reverb decay	59	LONG ECHO	Extra long canyon echo effect
ROOM 10-19			CHORUS 60-69		
10	SMALL ROOM 1	approx. 0.5s reverb decay	60	SOFT CHORUS 1	Unobtrusive effect
11	SMALL ROOM 2	approx. 0.8s reverb decay	61	SOFT CHORUS 2	Unobtrusive effect with different color
12	SMALL ROOM 3	approx. 1.0s reverb decay	62	WARM CHORUS 1	Analog sounding
13	MID ROOM 1	approx. 1.2s reverb decay	63	WARM CHORUS 2	Analog sounding with different color
14	MID ROOM 2	approx. 1.5s reverb decay	64	PHAT CHORUS 1	Pronounced chorus effect
15	MID ROOM 3	approx. 1.8s reverb decay	65	PHAT CHORUS 2	Pronounced chorus effect with different color
16	BIG ROOM 1	approx. 2.0s reverb decay	66	CLASSIC FLANGER	Standard flanger effect
17	BIG ROOM 2	approx. 2.2s reverb decay	67	WARM FLANGER	More analog touch
18	BIG ROOM 3	approx. 2.5s reverb decay	68	DEEP FLANGER	Deep modulation impression
19	CHAPEL	approx. 3s reverb decay	69	HEAVY FLANGER	Extremely pronounced effect
PLATE 20-29			PHASE/PITCH 70-79		
20	SHORT PLATE	approx. 1.0s reverb decay	70	CLASSIC PHASER	Standard phaser effect
21	MID PLATE	approx. 1.5s reverb decay	71	WARM PHASER	More analog touch
22	LONG PLATE	approx. 2.2s reverb decay	72	DEEP PHASER	Deep modulation impression
23	VOCAL PLATE	approx. 1.2s reverb decay	73	HEAVY PHASER	Extreme strong effect
24	DRUMS PLATE	approx. 1.0s reverb decay	74	PITCH SHIFT DETUNE	2-3-times detune for a wider solo voice sound
25	GOLD PLATE 1	approx. 1.2s reverb decay	75	PITCH SHIFT +3	Minor third added voice
26	GOLD PLATE 2	approx. 2.0s reverb decay	76	PITCH SHIFT +4	Major third added voice
27	SHORT SPRING	approx. 1.0s reverb decay	77	PITCH SHIFT +7	Quint above added voice
28	MID SPRING	approx. 2.0s reverb decay	78	PITCH SHIFT -5	Fourth down added voice
29	LONG SPRING	approx. 2.5s reverb decay	79	PITCH SHIFT -12	1 octave down added voice
GATED/REVERSE 30-39			MULTI 1 80-89		
30	GATED REV SHORT	approx. 0.8s gate time	80	CHORUS + REVERB 1	Soft chorus + medium-short reverb
31	GATED REV MID	approx. 1.2s gate time	81	CHORUS + REVERB 2	Deep chorus + medium-long reverb
32	GATED REV LONG	approx. 2.0s gate time	82	FLANGER + REVERB 1	Soft flanger + medium-short reverb
33	GATED REV XXL	approx. 3.0s gate time	83	FLANGER + REVERB 2	Deep flanger + medium-long reverb
34	GATED REV DRUMS 1	approx. 0.8s gate time	84	PHASER + REVERB 1	Soft phaser + medium-short reverb
35	GATED REV DRUMS 2	approx. 1.2s gate time	85	PHASER + REVERB 2	Deep phaser + medium-long reverb
36	REVERSE SHORT	approx. 0.8s reverb raise	86	PITCH + REVERB 1	Soft voice detuning + medium-short reverb
37	REVERSE MID	approx. 1.2s reverb raise	87	PITCH + REVERB 2	Fourth above interval + medium-long reverb
38	REVERSE LONG	approx. 2.0s reverb raise	88	DELAY + REVERB 1	Short delay + medium-short reverb
39	REVERSE XXL	approx. 3.0s reverb raise	89	DELAY + REVERB 2	Medium-long delay + medium-long reverb
EARLY REFLECTIONS 40-49			MULTI 2 90-99		
40	EARLY REFLECTION 1	Short	90	DELAY + GATED REV	Short delay + medium-long gated reverb
41	EARLY REFLECTION 2	Medium-short	91	DELAY + REVERSE	medium-short delay + medium-long reverse reverb
42	EARLY REFLECTION 3	Medium-long	92	DELAY + CHORUS 1	Short delay + soft chorus
43	EARLY REFLECTION 4	Long	93	DELAY + CHORUS 2	Medium-long delay + deep chorus
44	SHORT AMBIENCE	Short	94	DELAY + FLANGER 1	Short delay + soft flanger
45	MID AMBIENCE	Medium-short	95	DELAY + FLANGER 2	Medium-long delay + deep flanger
46	LIVE AMBIENCE	Medium-short	96	DELAY + PHASER 1	Short delay + soft phaser
47	BIG AMBIENCE	Medium-long	97	DELAY + PHASER 2	Medium-long delay + deep phaser
48	STADIUM	Long	98	DELAY + PITCH 1	Short delay + fourth down interval
49	GHOST AMBIENCE	Extra-long special FX	99	DELAY + PITCH 2	Medium-long delay + minor third above interval

7. WARRANTY

§ 1 OTHER WARRANTY RIGHTS AND NATIONAL LAW

1. This warranty does not exclude or limit the buyer's statutory rights provided by national law, in particular, any such rights against the seller that arise from a legally effective purchase contract.

2. The warranty regulations mentioned herein are applicable unless they constitute an infringement of national warranty law.

§ 2 ONLINE REGISTRATION

Please do remember to register your new BEHRINGER equipment right after your purchase by visiting www.behringer.com (alternatively www.behringer.de) and kindly read the terms and conditions of our warranty carefully.

Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently.

Thank you for your cooperation!

§ 3 WARRANTY

1. BEHRINGER (BEHRINGER International GmbH including all BEHRINGER subsidiaries listed on the enclosed page, except BEHRINGER Japan) warrants the mechanical and electronic components of this product to be free of defects in material and workmanship for a period of one (1) year* from the original date of purchase, in accordance with the warranty regulations described below. If the product shows any defects within the specified warranty period that are not excluded from this warranty as described under § 5, BEHRINGER shall, at its discretion, either replace or repair the product using suitable new or reconditioned parts. In the case that other parts are used which constitute an improvement, BEHRINGER may, at its discretion, charge the customer for the additional cost of these parts.

2. If the warranty claim proves to be justified, the product will be returned to the user freight prepaid.

3. Warranty claims other than those indicated above are expressly excluded.

§ 4 RETURN AUTHORIZATION NUMBER

1. To obtain warranty service, the buyer (or his authorized dealer) must call BEHRINGER (see enclosed list) during normal business hours **BEFORE** returning the product. All inquiries must be accompanied by a description of the problem. BEHRINGER will then issue a return authorization number.

2. Subsequently, the product must be returned in its original shipping carton, together with the return authorization number to the address indicated by BEHRINGER.

3. Shipments without freight prepaid will not be accepted.

§ 5 WARRANTY REGULATIONS

1. Warranty services will be furnished only if the product is accompanied by a copy of the original retail dealer's invoice. Any product deemed eligible for repair or replacement under the terms of this warranty will be repaired or replaced.

2. If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national or local level, in any country which is not the country for which the product was originally developed and manufactured, this modification/adaptation shall not be considered a defect in materials or workmanship. The warranty does not cover any such modification/adaptation, irrespective of whether it was carried out properly or not. Under the terms of this warranty, BEHRINGER shall not be held responsible for any cost resulting from such a modification/adaptation.

3. Free inspections and maintenance/repair work are expressly excluded from this warranty, in particular, if caused by improper handling of the product by the user. This also applies to defects caused by normal wear and tear, in particular, of faders, crossfaders, potentiometers, keys/buttons, tubes, guitar strings, illuminants and similar parts.

4. Damages/defects caused by the following conditions are not covered by this warranty:

- ▲ improper handling, neglect or failure to operate the unit in compliance with the instructions given in BEHRINGER user or service manuals.
- ▲ connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used.
- ▲ damages/defects caused by force majeure or any other condition that is beyond the control of BEHRINGER.

5. Any repair or opening of the unit carried out by unauthorized personnel (user included) will void the warranty.

6. If an inspection of the product by BEHRINGER shows that the defect in question is not covered by the warranty, the inspection costs are payable by the customer.

7. Products which do not meet the terms of this warranty will be repaired exclusively at the buyer's expense. BEHRINGER will inform the buyer of any such circumstance. If the buyer fails to submit a written repair order within 6 weeks after notification, BEHRINGER will return the unit C.O.D. with a separate invoice for freight and packing. Such costs will also be invoiced separately when the buyer has sent in a written repair order.

§ 6 WARRANTY TRANSFERABILITY

This warranty is extended exclusively to the original buyer (customer of retail dealer) and is not transferable to anyone who may subsequently purchase this product. No other person (retail dealer, etc.) shall be entitled to give any warranty promise on behalf of BEHRINGER.

§ 7 CLAIM FOR DAMAGES

Failure of BEHRINGER to provide proper warranty service shall not entitle the buyer to claim (consequential) damages. In no event shall the liability of BEHRINGER exceed the invoiced value of the product.

* Customers in the European Union please contact BEHRINGER Germany Support for further details.

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FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION



Responsible party name: **BEHRINGER USA, Inc.**

Address: **18912 North Creek Parkway, Suite 200
Bothell, WA 98011, USA**

Phone/Fax No.: **Phone: +1 425 672 0816,
Fax: +1 425 673 7647**

hereby declares that the product(s)

complies/comply with the FCC rules as mentioned in the following paragraph:

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ▲ Reorient or relocate the receiving antenna.
- ▲ Increase the separation between the equipment and receiver.
- ▲ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ▲ Consult the dealer or an experienced radio/TV technician for help.

Important information:

Changes or modifications to the equipment not expressly approved by BEHRINGER USA can void the user's authority to use the equipment.

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